

# **OIL ANALYSIS REPORT**

# Area COOPER/FRIEDMAN ELECTRIC SUPPLY HINO 388250

Diesel Engine

PETRO CANADA DURON SHP 10W30 (16 QTS)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

#### Wear

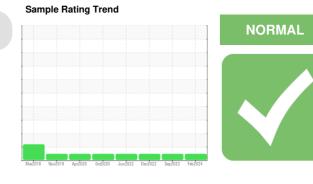
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

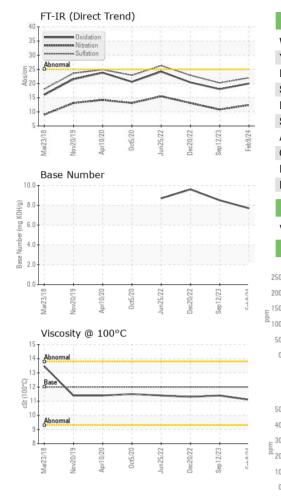
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110195	PCA0099722	PCA0076995
Sample Date		Client Info		09 Feb 2024	12 Sep 2023	20 Dec 2022
Machine Age	mls	Client Info		230628	0	174684
Oil Age	mls	Client Info		0	10000	14266
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	32	13	18
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	12	2	8
Lead	ppm	ASTM D5185m	>40	2	<1	2
Copper	ppm	ASTM D5185m	>330	5	<1	4
Tin	ppm	ASTM D5185m	>15	<1	0	1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	10	218	11
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	78	5	73
Manganese	ppm	ASTM D5185m	0	1	0	<1
Magnesium	ppm	ASTM D5185m	950	857	13	827
Calcium	ppm	ASTM D5185m	1050	1279	2134	1222
Phosphorus	ppm	ASTM D5185m	995	1043	1052	930
Zinc	ppm	ASTM D5185m	1180	1275	1163	1177
Sulfur	ppm	ASTM D5185m	2600	3620	3697	3062
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	4	3
Sodium	ppm	ASTM D5185m		7	<1	6
Potassium	ppm	ASTM D5185m	>20	13	9	9
INFRA-RED		method	limit/base	current	history1	history2
Soot %	0/	*ASTM D7844	>3	1.2	0.7	1.3
0001 /0	%					
Nitration	Abs/cm	*ASTM D7624	>20	12.4	10.8	13.1
		*ASTM D7624 *ASTM D7415	>20 >30	12.4 22.0	10.8 20.2	13.1 22.9
Nitration	Abs/cm Abs/.1mm	*ASTM D7415				
Nitration Sulfation	Abs/cm Abs/.1mm	*ASTM D7415 method	>30	22.0	20.2	22.9



# **OIL ANALYSIS REPORT**



			VISUAL		method	limit/base	current	history1	history2
			White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
			Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
-	1	-	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
-		-	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	States of Lot of	<b>REFERENCE</b>	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
			Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
144	./23 -	/24 -	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
המרקה	Sep 12/23 -	Feb9/24	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
			Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
			Free Water	scalar	*Visual	20.L	NEG	NEG	NEG
		_	FLUID PROP		method	limit/base	current	history1	history2
			Visc @ 100°C	cSt	ASTM D445	12.00	11.1	11.4	11.3
			GRAPHS						
			Iron (ppm)				Lead (ppm)		
•			250 T			100			
- 77/n7:12/	Sep12/23 .	Loka M	200 - Severe			80	) - Severe		
חמיי	Sep1	Lab	Abnormal			E 60			
			B 100 - Abnormal			H 40	) - Abnormal		
			50			20	)		
				2+-	3+			2	3 3
			Mar23/18 - Nov20/19 - Apr10/20 -	0ct5/20 Jun25/22	Dec20/22 Sep12/23	Feb9/24	Mar23/18 Nov20/19 Apr10/20	0ct5/20 Jun25/22	Dec20/22 Sep12/23 Feb9/24
				7	Sei	LL.		7	E Sel
			Aluminum (ppm)			50	Chromium (p	pm)	
			40 Severe	1		50	Severe		
77	23 -	V Cr	and 20 - Abnormal			E 30	Abnormal		
naccn/z	Sep 1 2/23	L-40.01					1.		
-	\$		10			10			
			V13 + + 0 - +	/20 -	122	124		/20 -	/22
			Mar23/18 - Nov20/19 - Apr10/20 -	0ct5/20 Jun25/22	Dec20/22 Sep12/23	Feb9/24	Mar23/18 Nov20/19 Apr10/20	0ct5/20 Jun25/22	Dec20/22 - Sep12/23 - Feb9/24 -
			Copper (ppm)	7	- 0		Silicon (ppm)		
			800 T			80			
			600			60			
			톱 400 - Bibliomal			E 40	Abnormal		
			200			20			
			0		_				
			Mar23/18 Nov20/19 Apr10/20	0ct5/20 Jun25/22	Dec20/22 Sep12/23	Feb 9/24	Mar23/18 Nov20/19	0ct5/20 Jun25/22	Dec20/22 Sep12/23 Feb9/24
			Mar Novi	Juni	Sep	ци.	Mar Novi Apri	Juni	Dec Sep
			Viscosity @ 100°	С			Base Number	-	
			<sup>16</sup>			10.0 P		-	$\sim$
			O 14 - Abnormal			.8 KOH			
			()-00112 tg			(0)HOX HOX Bu) ta mumu a 2.0			
			10						
						ag 2.0			
			20++++++8+	20 + .	22			20 + -	22 +
			Mar23/18 Nov20/19 Apr10/20	0ct5/20 Jun25/22	Dec20/22 Sep12/23	Feb9/24	Mar23/18 Nov20/19 Apr10/20	0ct5/20 Jun25/22	Dec20/22 Sep12/23 Feb9/24
			2 2 4	ŕ	o v		A N A	JL L	0 0
Li	aborat	tory	: WearCheck USA - 5	01 Madisc	n Ave., Cary	v, NC 27513	м	ILLER TRUCK	LEASING #121
S	ample	No.	: PCA0110195	Rece	ived : 12	2 Apr 2024			107 HOW LANE
	ab Nu				5 Apr 2024		NEW B	RUNSWICK, NJ	
			: 10977155			5 Apr 2024 - W	les Davis	<b>c</b> .	US 08901
			: MOB 1 (Additional T			n			ct: Anthony Cursi
s sa			, contact Customer Ser						rtransgroup.com

To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: MILNEW [WUSCAR] 06147077 (Generated: 04/15/2024 18:59:04) Rev: 1

Certificate L2367

Contact/Location: Anthony Cursi - MILNEW

T: (732)358-4027

F: (732)400-8475